

REMARKS

The Office Action mailed June 17, 2003, has been carefully reviewed and by this Amendment, claims 1 and 3-8 have been amended, and new claims 17-18 have been added. Claims 1-18 are pending in the application; claims 9-16 have been withdrawn.

The Examiner objected to claim 8 as containing an informality which Applicants have corrected herein, along with informalities noted in the specification.

The Examiner rejected claims 1 and 3 as being anticipated by U.S. Patent No. 5,943,464 to Khodja, and under 35 U.S.C. 103(a) rejected claims 2 and 4-7 as being unpatentable over Khodja in view of U.S. Patent No. 4,913,507 to Stamnitz et al. ("Stamnitz"), and rejected claim 8 as being unpatentable over Khodja in view of Stamnitz and further in view of U.S. Patent No. 5,061,028 to Khanarian et al.

Claims 1 and 4 have been amended to clarify the subject matter of the present invention, with the amendments being supported in the specification at page 7, lines 13-26, page 8, lines 3-27, and Figures 1A, 1B, 3A and 3B. As set forth in amended claims 1 and 4, the present invention is directed to a method for converting the wavelength of a signal beam combined to a pump beam, and a wavelength converter for converting the wavelength of a signal beam combined to a pump beam, having a channel type polymeric waveguide which includes nonlinear polymeric material having a parallelogram-shaped metal plate electrode between a polymeric bottom cladding and a polymeric top cladding in the middle of the waveguide. This is not shown or suggested by Khodja, either alone or in combination with Stamnitz .

Khodja teaches a waveguide having a periodically arranged grating in which the

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grating periodicity is equal to the coherent length of the interacting fundamental (see column 8, lines 52-53, Figure 2, reference numerals 35a, 35b). The grating is a necessary structure for the quasi phase-matching method which is used in Khodja.

The present invention, by contrast, does not include a grating structure for a wavelength converter, but instead performs the phase matching by implementing a birefringent phase-matching method, and implements a parallelogram-shaped metal plate electrode between a polymeric bottom cladding and a polymeric top cladding which simplifies the manufacturing process as compared with the prior art.

For at least the foregoing reasons, amended claims 1 and 4 are presented as being in condition for allowance. Claims 2, 3, 5-8, 17 and 18 are also in condition for allowance as claims properly dependent on an allowable base claim and for the subject matter contained therein. Favorable reconsideration and allowance thereof is requested. Should the Examiner have any questions or comments, the Examiner is cordially invited to telephone the undersigned attorney so that the present application can receive an early Notice of Allowance.

Respectfully submitted,

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